STN - Structure Search
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10/583,803

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L4 ANSWER 1 OF 17 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2006:847858 CAPLUS
DOCUMENT NUMBER: 145:278405
TITLE: Drugs with improved hydrophobicity for incorporation in medical devices
INVENTOR(S): Desai, Neil P.; Tao, Chunlin; Yu, Chengzhi; Wang, Qinwei; Soon-Shiong, Patrick
PATENT ASSIGNEE(S): American Bioscience, Inc., USA
SOURCE: PCT Int. Appl., 43pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006089207	A2	20060824	WO 2006-US5799	20060221
WO 2006089207	A3	20070518		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA				
AU 2006214100	A1	20060824	AU 2006-214100	20060221
CA 2598213	A1	20060824	CA 2006-2598213	20060221
PRIORITY APPLN. INFO.:			US 2005-654175P	P 20050218
			WO 2006-US5799	W 20060221

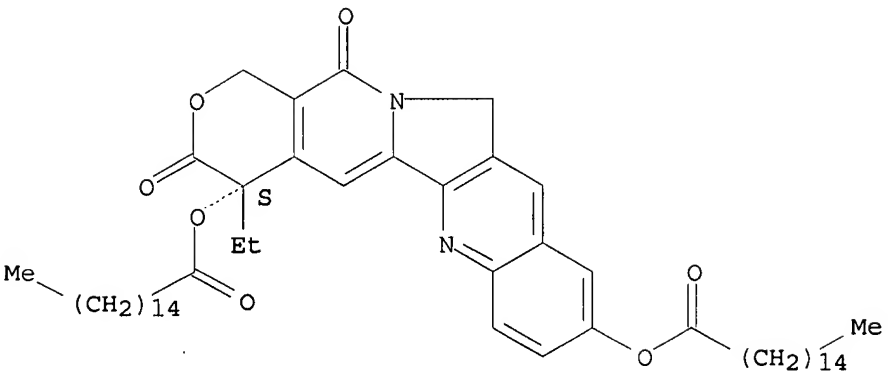
OTHER SOURCE(S): MARPAT 145:278405

AB The invention provides a medical device comprising a hydrophobic analog of a medicament known to inhibit cell proliferation and migration. The invention also provides a method of treating a narrowing in a body passageway comprising placing an implantable medical device comprising a hydrophobic analog of a medicament known to inhibit cell proliferation and migration. The medicaments can be incorporated within or coated on the device. The invention further provides hydrophobic analogs of medicaments known to inhibit cell proliferation and migration.

IT 848078-09-1P 848078-11-5P 857892-69-4P
857892-70-7P 857892-71-8P 857892-72-9P
857892-73-0P 857892-77-4P 857892-80-9P
857892-81-0P 857892-82-1P 857892-83-2P
906649-23-8P 906649-24-9P
RL: PRP (Properties); PUR (Purification or recovery); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(drugs with improved hydrophobicity for incorporation in medical devices)

RN 848078-09-1 CAPLUS
CN 1H-Pyrano[3',4':6,7]indolizino[1,2-b]quinoline-3,14(4H,12H)-dione, 4-ethyl-4,9-bis(1-oxopropoxy)-, (4S)- (CA INDEX NAME)

Absolute stereochemistry.



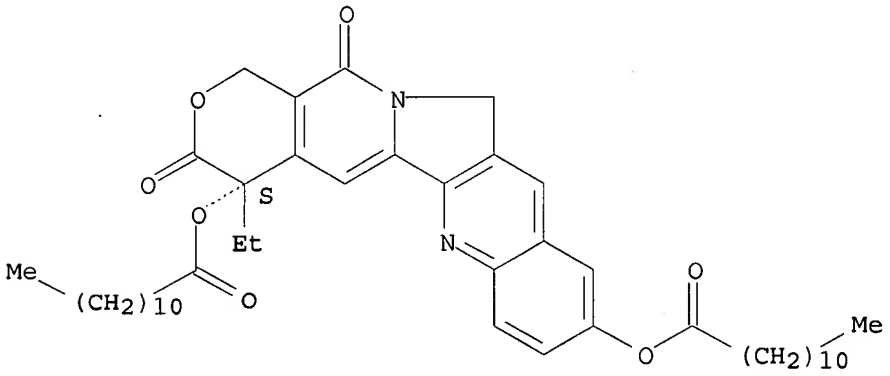
L4 ANSWER 2 OF 17 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2006:620137 CAPLUS
DOCUMENT NUMBER: 145:230786
TITLE: Preparation of precursors hydroxycamptothecine ester and its derivative as antitumor agent
INVENTOR(S): Lu, Wei; He, Xungui; Zhang, Xiongwen; Ding, Jian
PATENT ASSIGNEE(S): Shanghai Inst. of Medicament, Chinese Academy of Sciences, Peop. Rep. China
SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 12 pp.
CODEN: CNXXEV
DOCUMENT TYPE: Patent
LANGUAGE: Chinese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1673226	A	20050928	CN 2004-10017128	20040323

PRIORITY APPLN. INFO.: CN 2004-10017128 20040323
OTHER SOURCE(S): CASREACT 145:230786; MARPAT 145:230786
GI

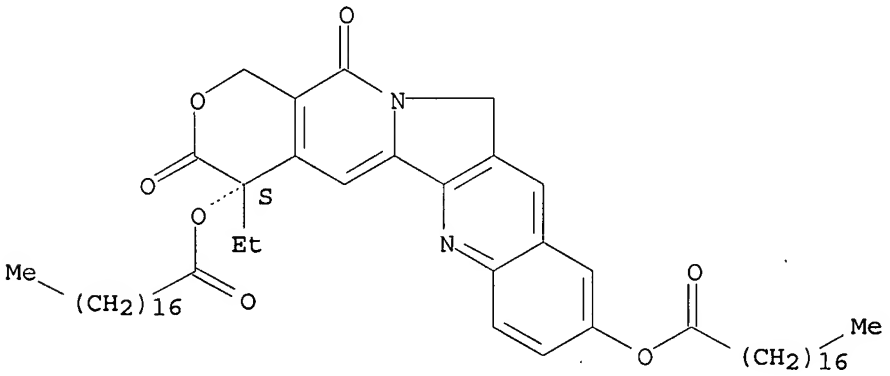
RN 905564-83-2 CAPLUS
CN Dodecanoic acid, (4S)-4-ethyl-3,4,12,14-tetrahydro-3,14-dioxo-1H-pyrano[3',4':6,7]indolizino[1,2-b]quinoline-4,9-diyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 905564-84-3 CAPLUS
CN Octadecanoic acid, (4S)-4-ethyl-3,4,12,14-tetrahydro-3,14-dioxo-1H-pyrano[3',4':6,7]indolizino[1,2-b]quinoline-4,9-diyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L4 ANSWER 3 OF 17 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2006:296608 CAPLUS
DOCUMENT NUMBER: 144:357695
TITLE: Preparation of parenteral solutions of poorly water soluble drugs using dimethyl isosorbide
INVENTOR(S): Desai, Neil P.; Tao, Chunlin; Yang, Andrew; Beals Grim, Bridget; De, Tapas; Soon-Shiong, Patrick
PATENT ASSIGNEE(S): American Bioscience, Inc., USA
SOURCE: PCT Int. Appl., 18 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006034147	A2	20060330	WO 2005-US33396	20050916

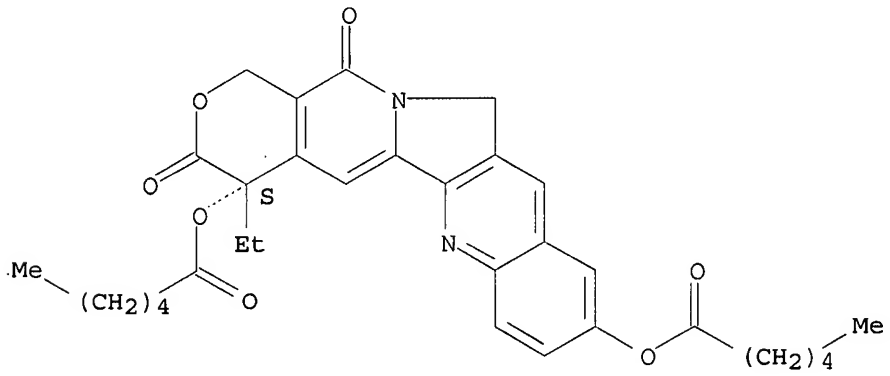
WO 2006034147 A3 20061214
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
PRIORITY APPLN. INFO.: US 2004-610407P P 20040916

AB Sterile, stable, parenteral formulations of poorly water-soluble drugs dissolved in di-Me isosorbide (DMI), a water-miscible solvent, as well as methods for their preparation and administration are described. For example, an aqueous solution of cyclosporine A was prepared containing cyclosporine A 2.8 weight%, DMI 57.6 volume%, and water 42.4 volume%.

IT 848078-11-5 857892-69-4
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (preparation of parenteral solns. of poorly water soluble drugs using di-Me isosorbide)

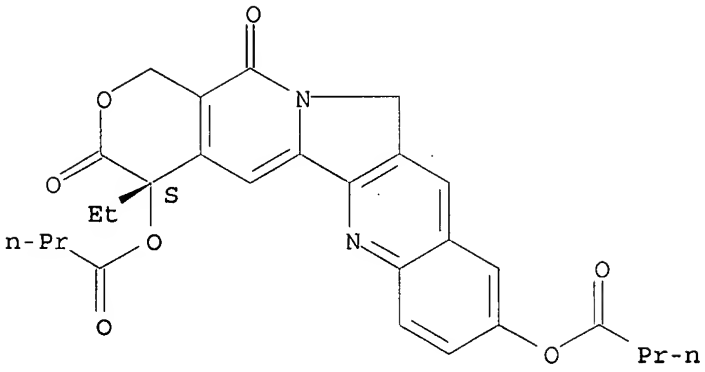
RN 848078-11-5 CAPLUS
CN Hexanoic acid, (4S)-4-ethyl-3,4,12,14-tetrahydro-3,14-dioxo-1H-pyrano[3',4':6,7]indolizino[1,2-b]quinoline-4,9-diyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 857892-69-4 CAPLUS
CN Butanoic acid, (4S)-4-ethyl-3,4,12,14-tetrahydro-3,14-dioxo-1H-pyrano[3',4':6,7]indolizino[1,2-b]quinoline-4,9-diyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L4 ANSWER 4 OF 17 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2006:180167 CAPLUS
DOCUMENT NUMBER: 144:391205
TITLE: Copper-free Sonogashira reaction using 7-chloro camptothecins
AUTHOR(S): Luo, Yu; Gao, Heyong; Li, Yunfei; Huang, Weigang; Lu, Wei; Zhang, Zhaoguo
CORPORATE SOURCE: Shanghai Institute of Materia Medica, SIBS, Chinese Academy of Sciences, Graduate School of the Chinese Academy of Sciences, Shanghai, 201203, Peop. Rep. China
SOURCE: Tetrahedron (2006), 62(11), 2465-2470
CODEN: TETRAB; ISSN: 0040-4020
PUBLISHER: Elsevier B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 144:391205
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB We studied copper-free Sonogashira reaction using 7-chlorocamptothecins I (R1 = H, OAc), and determined that rac-BINAP/Pd(OAc)2 was an efficient catalyst for the coupling reaction. With this process, a number of 7-substituted camptothecins II [R1 = H, OAc; R2 = cyclopentyl, Ph, SiMe3, 2-hydroxyisopropyl] with a wide range of functional groups are potentially accessible. Besides, two drugs, SN-38 (III) and BNP-1350 (IV), could be prepared by this method.

IT 882737-92-0P
RL: PNU (Preparation, unclassified); PREP (Preparation)
(copper-free Sonogashira coupling reaction of 7-chlorocamptothecins with alkynes)

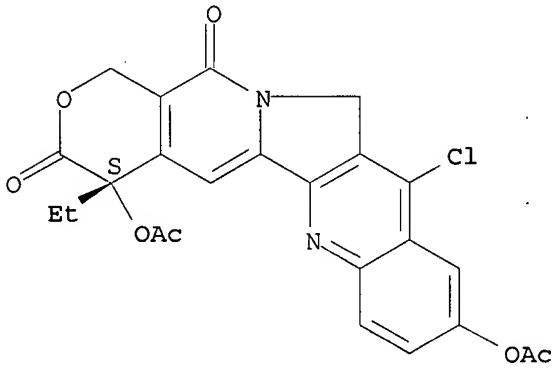
RN 882737-92-0 CAPLUS

CN 1H-Pyrano[3',4':6,7]indolizino[1,2-b]quinoline-3,14(4H,12H)-dione, 4,9-bis(acetyloxy)-4-ethyl-11-(3-hydroxy-3-methyl-1-butynyl)-, (4S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

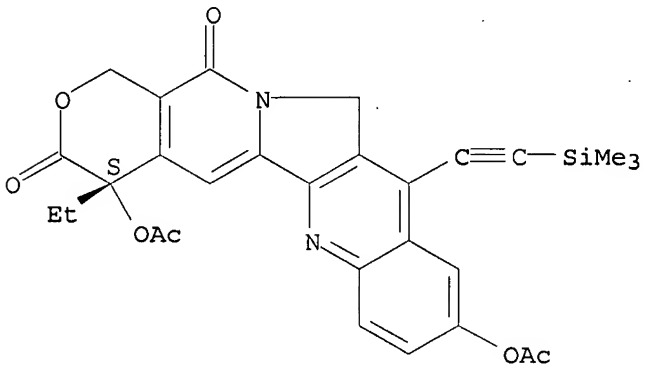
IT 882737-86-2P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and Sonogashira coupling reaction of, with acetylene derivs.; copper-free Sonogashira coupling reaction of 7-chlorocamptothecins with alkynes)
RN 882737-86-2 CAPLUS
CN 1H-Pyrano[3',4':6,7]indolizino[1,2-b]quinoline-3,14(4H,12H)-dione, 4,9-bis(acetyloxy)-11-chloro-4-ethyl-, (4S)- (CA INDEX NAME)

Absolute stereochemistry.



IT 882737-90-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation, desilylation, hydrogenation and O-deacetylation of; copper-free Sonogashira coupling reaction of 7-chlorocamptothecins with alkynes)
RN 882737-90-8 CAPLUS
CN 1H-Pyrano[3',4':6,7]indolizino[1,2-b]quinoline-3,14(4H,12H)-dione, 4,9-bis(acetyloxy)-4-ethyl-11-[(trimethylsilyl)ethynyl]-, (4S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 5 OF 17 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2005:1084194 CAPLUS
DOCUMENT NUMBER: 144:362547
TITLE: Synthesis and antitumor activity of 20-O-linked camptothecin ester derivatives

AUTHOR(S): Pan, Xiandao; Liu, Hongyan; Sun, Piaoyang; Zhu, Chenggen; Yang, Jing; Yuan, Kaihong; Han, Rui
CORPORATE SOURCE: Institute of Materia Medica, Chinese Academy of Medical Sciences and Peking Union Medical College, Beijing, 100050, Peop. Rep. China
SOURCE: Yaoxue Xuebao (2004), 39(8), 591-597
CODEN: YHHPAL; ISSN: 0513-4870
PUBLISHER: Yaoxue Xuebao Bianjibu
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 144:362547

AB To improve the profile of 20 (S)-camptothecin, a series of 20-O-linked camptothecin phenoxyacetic acid ester derivs. have been designed. These derivs. were synthesized by the method of acylation. Their chemical structures were confirmed with 1HNMR, IR, MS, and HRMS. The cytotoxicities of the compds. were tested by MIT assay. The in vivo antitumor activities of these esters were evaluated against mouse liver tumor H22 in mice. Twelve derivs. of camptothecin ester are new compds. In vitro and in vivo antitumor activity has indicated that some derivs. appeared significantly more effective than topotecan in the H22 mouse liver tumoral model.

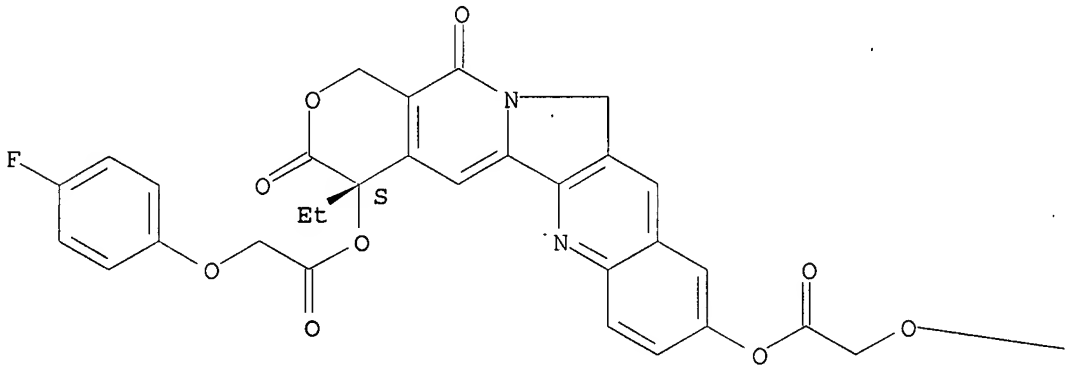
IT 634586-91-7P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(antitumor activity of 20-O-linked camptothecin ester derivs.)

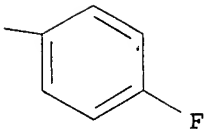
RN 634586-91-7 CAPLUS

CN Acetic acid, (4-fluorophenoxy)-, (4S)-4-ethyl-3,4,12,14-tetrahydro-3,14-dioxo-1H-pyrano[3',4':6,7]indolizino[1,2-b]quinoline-4,9-diyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A





REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 6 OF 17 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2005:612008 CAPLUS
DOCUMENT NUMBER: 143:120555
TITLE: Preparation of di-ester derivatives of camptothecins for cancer treatment
INVENTOR(S): Cao, Zhi-Song; Tao, Chunlin
PATENT ASSIGNEE(S): American Bioscience, Inc., USA
SOURCE: PCT Int. Appl., 14 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005062991	A2	20050714	WO 2004-US43978	20041223
WO 2005062991	A3	20050929		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2003-531941P P 20031223
OTHER SOURCE(S): MARPAT 143:120555

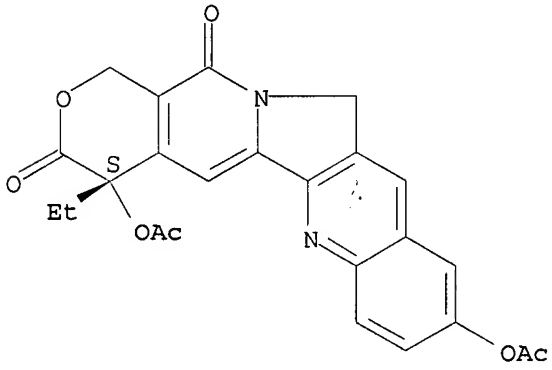
AB The present invention is related to lower alkyl 10,20-di-O-ester derivs. of camptothecins and pharmaceutical formulations thereof for treatment of cancers. A method for inhibition of the enzyme topoisomerase I by contacting the enzyme with the alkyl 10,20-di-O-esters of camptothecins is also described. The compds. and pharmaceutical formulations of the present invention possess increased biol. life span and bioavailability and reduced toxicity, while maintaining anti-cancer activity. Thus, 10-hydroxycamptothecin-10,20-dipropionate was prepared by the reaction of

1.0 g of 10-hydroxycamptothecin and 20 mL of propionic anhydride in a 81% yield. 10-Hydroxycamptothecin-10,20-dipropionate showed the in vitro growth inhibition of MX-1 (human breast carcinoma) cells at IC50 of 46.2 μM. Nanoparticles of 10-hydroxycamptothecin-10,20-dipropionate (30 mg) were prepared by sonication with human serum albumin and lyophilized. The resulting cake could be easily reconstituted to the original dispersion by addition of sterile water or saline. The particle size after reconstitution was the same as before lyophilization (50 to 220 nm).

IT 19685-12-2P 848078-09-1P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation and nanoparticle formulation of camptothecin 10,20-di-ester prodrugs for cancer treatment)

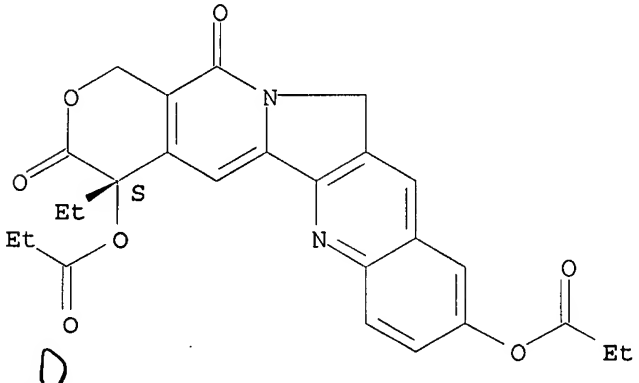
RN 19685-12-2 CAPLUS
CN 1H-Pyrano[3',4':6,7]indolizino[1,2-b]quinoline-3,14(4H,12H)-dione, 4,9-bis(acetyloxy)-4-ethyl-, (4S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 848078-09-1 CAPLUS
CN 1H-Pyrano[3',4':6,7]indolizino[1,2-b]quinoline-3,14(4H,12H)-dione, 4-ethyl-4,9-bis(1-oxopropoxy)-, (4S)- (CA INDEX NAME)

Absolute stereochemistry.



L4 ANSWER 7 OF 17 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2005:612006 CAPLUS
DOCUMENT NUMBER: 143:120554
TITLE: Preparation of camptothecin di-ester prodrugs for cancer treatment
INVENTOR(S): Soon-Shiong, Patrick; Desai, Neil P.; Tao, Chunlin;

10/583,803

	Yu, Chengzhi
PATENT ASSIGNEE(S):	American Bioscience, Inc., USA
SOURCE:	PCT Int. Appl., 37 pp.
	CODEN: PIXXD2
DOCUMENT TYPE:	Patent
LANGUAGE:	English
FAMILY ACC. NUM. COUNT:	1
PATENT INFORMATION:	

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
WO 2005062985	A2	20050714	WO 2004-US43719		20041223
WO 2005062985	A3	20050909			
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW					
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG					
US 2007161668	A1	20070712	US 2007-583803		20070123
PRIORITY APPLN. INFO.:			US 2003-532231P	P	20031223
			WO 2004-US43719	W	20041223

OTHER SOURCE(S): CASREACT 143:120554; MARPAT 143:120554

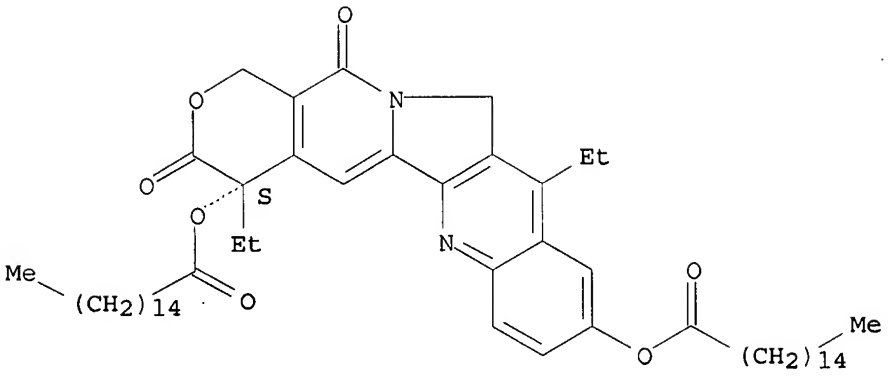
AB The present invention is related to 10,20-di-O ester derivs. of camptothecin and pharmaceutical formulations thereof. The compds. and pharmaceutical formulations of the present invention possess increased biol. life span and bioavailability and reduced toxicity, while maintaining anti-cancer activity. Thus, camptothecin 10,20-di-O-hexonate (CY4) was prepared by the reaction of 10-hydroxycamptothecin (1.8 g, 4.94 mmol) and hexanoic anhydride (50 mL) at 100° in a 86% yield. The CY4 compound showed the in vitro growth inhibition of MX-1 (human breast carcinoma) cells at IC50 of 7.8 μM. Nanoparticles of CY4 (20 mg) were prepared by sonication with human serum albumin and lyophilized without adding any cryoprotectant. The resulting cake could be easily reconstituted to the original dispersion by addition of sterile water or saline. The particle size after reconstitution was the same as before lyophilization (350 to 420 nm).

IT 857892-71-8P
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(preparation and nanoparticle formulation of camptothecin di-ester prodrugs for cancer treatment)

RN 857892-71-8 CAPLUS

CN Glycine, N-[(1,1-dimethylethoxy)carbonyl]-, (4S)-4-ethyl-3,4,12,14-tetrahydro-3,14-dioxo-1H-pyrano[3',4':6,7]indolizino[1,2-b]quinoline-4,9-diyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L4 ANSWER 8 OF 17 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2005:394830 CAPLUS
DOCUMENT NUMBER: 142:435789
TITLE: Preparation of tocopherol-modified pharmaceuticals
INVENTOR(S): Zhang, Yuehua; Gold, Lynn C.
PATENT ASSIGNEE(S): Sonus Pharmaceuticals, Inc., USA
SOURCE: U.S. Pat. Appl. Publ., 42 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005096340	A1	20050505	US 2004-978222	20041029
US 7223770	B2	20070529		
AU 2004285037	A1	20050512	AU 2004-285037	20041029
CA 2543722	A1	20050512	CA 2004-2543722	20041029
WO 2005042539	A1	20050512	WO 2004-US36127	20041029
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1682552	A1	20060726	EP 2004-817489	20041029
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK				
CN 1875022	A	20061206	CN 2004-80032084	20041029
BR 2004015858	A	20070109	BR 2004-15858	20041029
JP 2007509978	T	20070419	JP 2006-538354	20041029
MX 2006PA04429	A	20061211	MX 2006-PA4429	20060421
IN 2006KN01255	A	20070427	IN 2006-KN1255	20060512
US 2006229359	A1	20061012	US 2006-450795	20060608
US 2007207196	A1	20070906	US 2007-690005	20070322

PRIORITY APPLN. INFO.:		
US 2003-515364P	P	20031029
US 2004-556137P	P	20040324
US 2004-558762P	P	20040401
US 2004-621655P	P	20041026
US 2004-978222	A1	20041029

WO 2004-US36127 W 20041029

AB Tocopherol-modified pharmaceuticals, emulsions, microemulsions, and micelle formulations that include the above drugs, methods for making the compds. and formulations, methods for administering the compds. and formulations; and methods for treating conditions using the compds. and formulations are disclosed. Thus, tocopherol succinate 7-ethyl-10-hydroxycamptothecin was prepared starting from 7-ethyl-10-hydroxycamptothecin. An emulsion contained the above drug 0.69, vitamin E 7.31, TPGS 5, Poloxamer-407 1, and saline 86%.

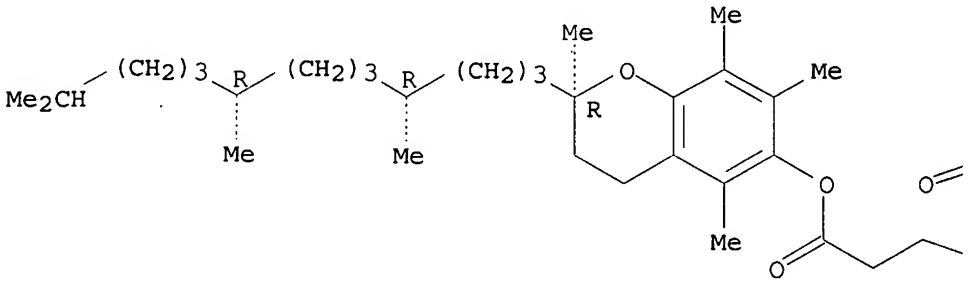
IT 850655-06-0P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of tocopherol-modified pharmaceuticals)

RN 850655-06-0 CAPLUS

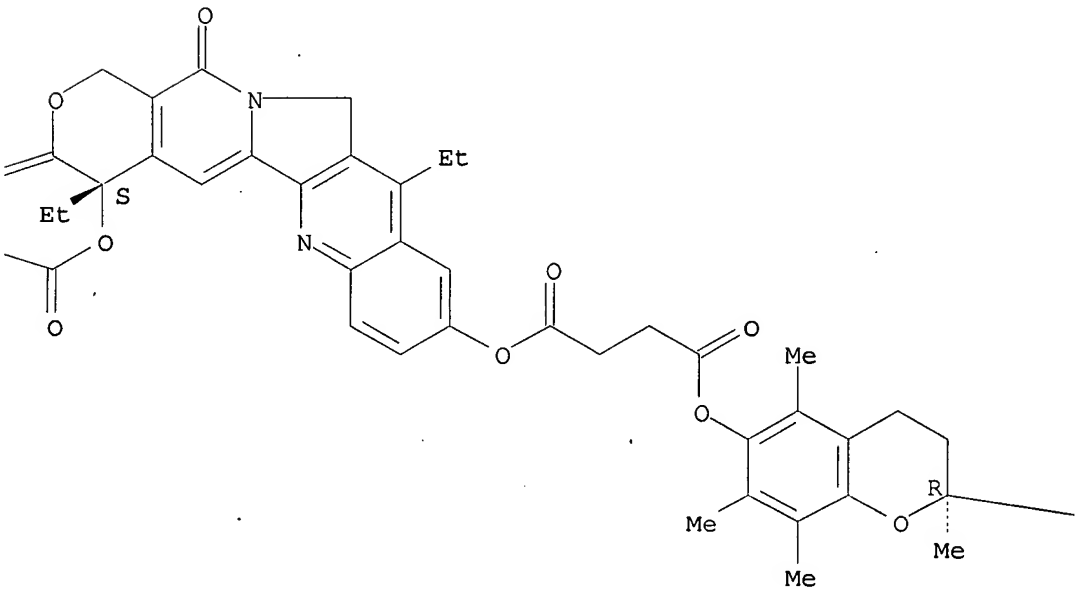
CN Butanedioic acid, (4S)-4,11-diethyl-3,4,12,14-tetrahydro-3,14-dioxo-1H-pyrano[3',4':6,7]indolizino[1,2-b]quinoline-4,9-diyl bis[(2R)-3,4-dihydro-2,5,7,8-tetramethyl-2-[(4R,8R)-4,8,12-trimethyltridecyl]-2H-1-benzopyran-6-yl] ester (9CI) (CA INDEX NAME)

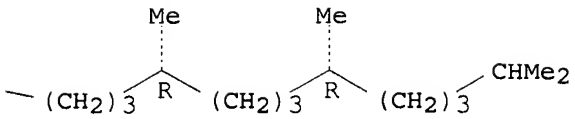
Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

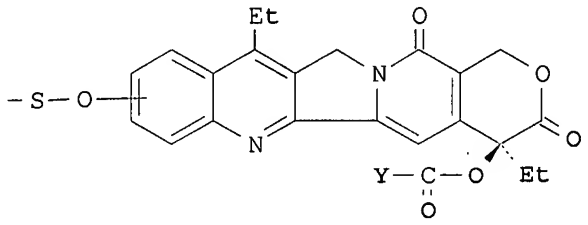




L4 ANSWER 9 OF 17 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:905775 CAPLUS
DOCUMENT NUMBER: 141:380058
TITLE: Hydroxy-substituted 20-acyloxycamptothecin polymer derivatives and use of the same for the manufacture of an antiproliferative medicament
PATENT ASSIGNEE(S): Debio Recherche Pharmaceutique S.A., Switz.
SOURCE: PCT Int. Appl., 43 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004092205	A1	20041028	WO 2003-IB1430	20030416
W: CH				
PRIORITY APPLN. INFO.:			WO 2003-IB1430	20030416

GI

X = 

AB The present invention relates to pharmacol. active hydroxy-substituted 20-acyloxy-7-ethylcamptothecin polymer derivs., X1C(:O)O(CH2CH2O)n(C:O)X2 [I; n = 10 - 1000; when X1 = (un)branched C1-6-alkyl then C(:O) is

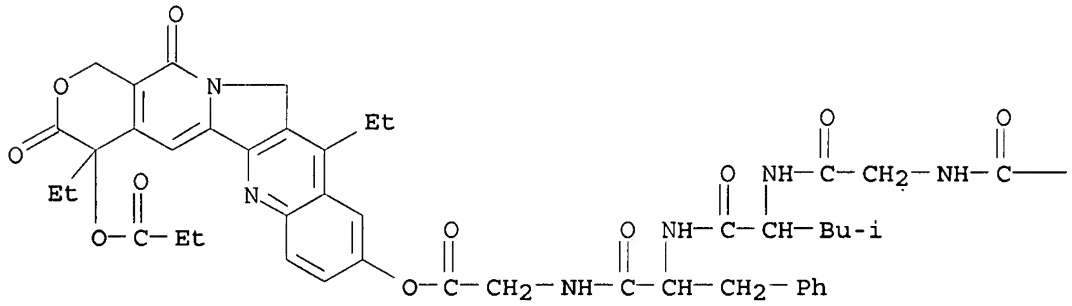
missing; or X1, X2 = X; Y = Me(CH2)m; m = 1 - 18; S = peptide spacer {e.g., Gly-Leu-Phe-Gly, Gly-Phe-Leu-Gly, Gly-Phe-Phe-Ala, Gly-Phe-Phe-Leu, Gly-Phe-Tyr-Ala, Ala-Gly-Val-Phe, Gly-Leu-Ala, Gly-Leu-Gly, Gly-Phe-Gly, Gly-Phe-Ala, D-Ala-Phe-Lys, D-Val-Leu-Lys, Lys-Gly-Leu-Phe-Gly (with at least one of α- and ε-amino of Lys being linked through a carbamate bond or linked with an aliphatic diamine though a carbamate bond)}], which have antiproliferative cell activity and are water-soluble Thus, H-Gly-Leu-Phe-Gly-OH is treated with 10 kD polyethylene glycol monomethyl ether benzotriazolyl carbonate, and then coupled with 7-ethyl-10-hydroxycamptothecin 20-O-propionate to give the tethered alkaloid I [X1 = Me (with no C:O next to it), X2 = X, Y = Et, S = Gly-Leu-Phe-Gly, PEG = 10 kD]. The latter was tested for pharmacol. activity [T/C = 130% at 50 mg/kg and 164% at 100 mg/kg in mice injected with P388/VCR cells].

IT 781640-44-6DP, 10 kD PEG
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(hydroxy-substituted 20-acyloxycamptothecin polymer derivs. and use thereof for the manufacture of an antiproliferative medicament)

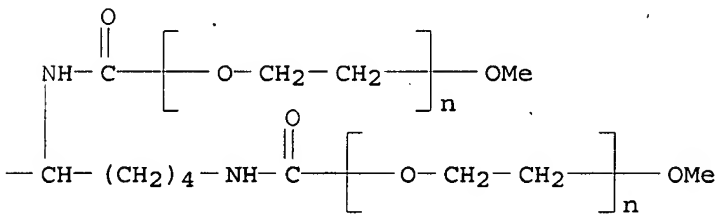
RN 781640-44-6 CAPLUS

CN Poly(oxy-1,2-ethanediyl), α-hydro-ω-methoxy-, diester with N2,N6-dicarboxy-L-lysylglycyl-L-leucyl-L-phenylalanylglycine 5-[(4S)-4,11-diethyl-3,4,12,14-tetrahydro-3,14-dioxo-4-(1-oxopropoxy)-1H-pyrano[3',4':6,7]indolizino[1,2-b]quinolin-9-yl] ester (9CI) (CA INDEX NAME)

PAGE 1-A



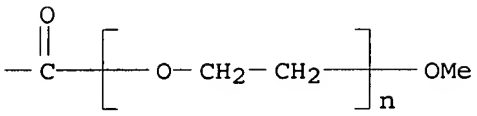
PAGE 1-B



IT 781640-41-3DP, 10 kD PEG 781640-43-5DP, 10 kD PEG
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(hydroxy-substituted 20-acyloxycamptothecin polymer derivs. and use thereof for the manufacture of an antiproliferative medicament)

RN 781640-41-3 CAPLUS

CN Poly(oxy-1,2-ethanediyl), α-hydro-ω-methoxy-, ester with N-carboxyglycyl-L-leucylglycine 3-(4S)-4,11-diethyl-3,4,12,14-tetrahydro-3,14-dioxo-4-(1-oxopropoxy)-1H-pyrano[3',4':6,7]indolizino[1,2-b]quinolin-

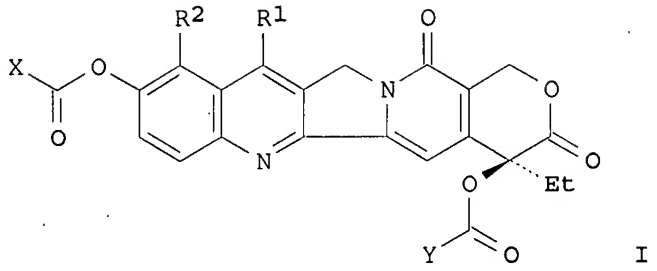


REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

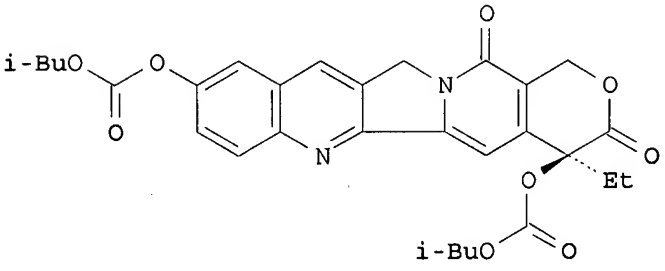
L4 ANSWER 10 OF 17 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:884286 CAPLUS
DOCUMENT NUMBER: 142:316991
TITLE: Preparation of camptothecin carbonates and esters with enhanced antitumor activity
INVENTOR(S): Lu, Wei; Zhu, Qin; Pan, Junfang; Cai, Junchao; Ding, Jian
PATENT ASSIGNEE(S): Shanghai Institute of Pharmacy, Chinese Academy of Sciences, Peop. Rep. China; Huatuo Medical Science and Technology Development Co., Ltd.
SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 20 pp.
CODEN: CNXXEV
DOCUMENT TYPE: Patent
LANGUAGE: Chinese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1465577	A	20040107	CN 2002-112268	20020627
PRIORITY APPLN. INFO.:			CN 2002-112268	20020627

OTHER SOURCE(S): MARPAT 142:316991
GI



I



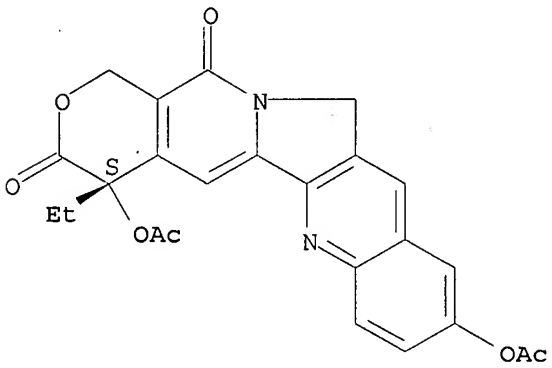
II

AB Title compds. I [wherein X = R3 or OR3; Y = R4 or OR4; R1 = H or alkyl; R2 = H or NO2; R3, R4 = H, alk(en/yn)yl, hydroxyalkyl, (un)substituted aryl or heterocyclyl] were prepared For example, 10-hydroxycamptothecin underwent acylation with iso-Bu chloroformate to give II. Some I showed 20.1-92.2% tumor inhibition at the dose of 2-6 mg/Kg, while 5-Fu showed 78.4% inhibition at a dose of 25 mg/Kg. The good antitumor activity of I is attributed to the introduction of carbonate and/or ester groups so that the active parts of camptothecins can be stabilized.

IT 19685-12-2P 848078-09-1P 848078-11-5P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of camptothecin carbonates and esters with enhanced antitumor activity)

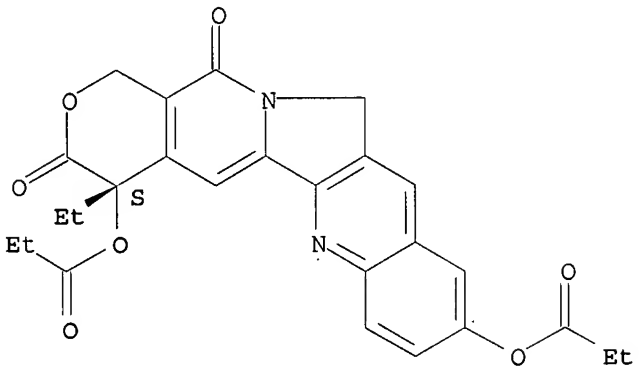
RN 19685-12-2 CAPLUS
CN 1H-Pyrano[3',4':6,7]indolizino[1,2-b]quinoline-3,14(4H,12H)-dione, 4,9-bis(acetyloxy)-4-ethyl-, (4S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



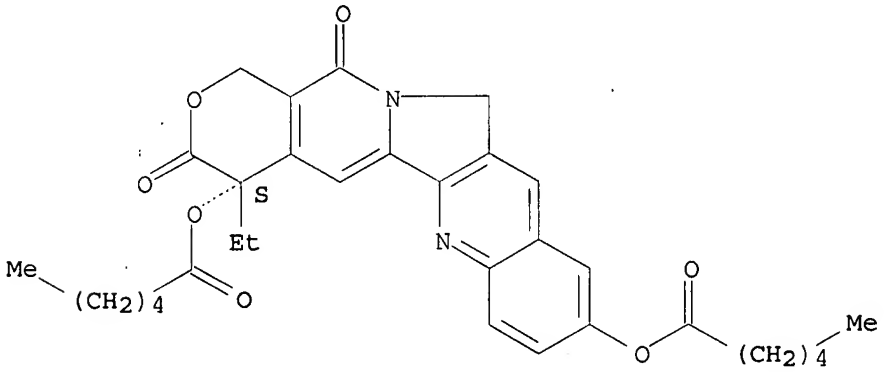
RN 848078-09-1 CAPLUS
CN 1H-Pyrano[3',4':6,7]indolizino[1,2-b]quinoline-3,14(4H,12H)-dione, 4-ethyl-4,9-bis(1-oxopropoxy)-, (4S)- (CA INDEX NAME)

Absolute stereochemistry.



RN 848078-11-5 CAPLUS
CN Hexanoic acid, (4S)-4-ethyl-3,4,12,14-tetrahydro-3,14-dioxo-1H-pyrano[3',4':6,7]indolizino[1,2-b]quinoline-4,9-diyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



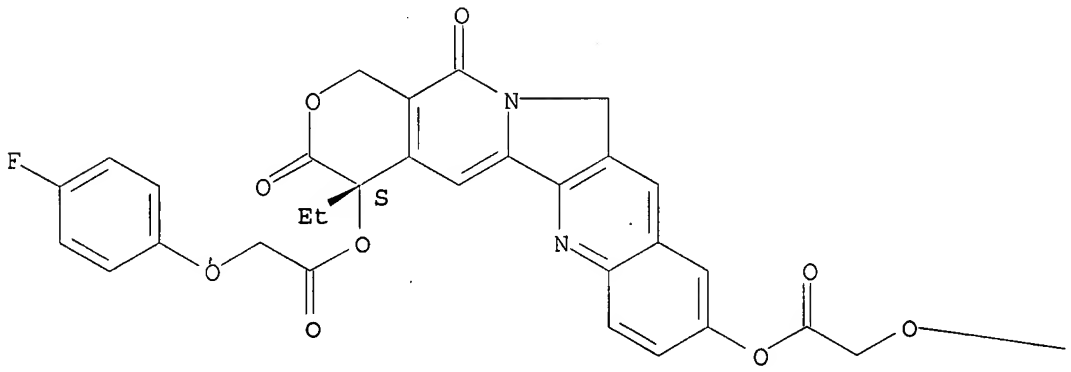
L4 ANSWER 11 OF 17 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:795092 CAPLUS
DOCUMENT NUMBER: 140:27961
TITLE: Regioselective synthesis and cytotoxicities of camptothecin derivatives modified at the 7-, 10- and 20-positions
AUTHOR(S): Pan, Xian-Dao; Han, Rui; Sun, Piao-Yang
CORPORATE SOURCE: Institute of Materia Medica, Chinese Academy of Medical Sciences and Peking Union Medical College, Beijing, 100050, Peop. Rep. China
SOURCE: Bioorganic & Medicinal Chemistry Letters (2003), 13(21), 3739-3741
CODEN: BMCLE8; ISSN: 0960-894X
PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 140:27961
AB A series of 7-acyloxymethylcamptothecin and 20-O-acyl-7-acyloxymethylcamptothecin derivs. were regioselectively prepared on different solvents. 7-Acyloxymethylcamptothecins possess more efficacy than 20-O-acyl-7-acyloxymethylcamptothecins against six human cancer cell lines in vitro.

IT 634586-91-7P 634587-13-6P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(regioselective synthesis and cytotoxicities of camptothecin derivs. modified at the 7-, 10- and 20-positions)

RN 634586-91-7 CAPLUS
CN Acetic acid, (4-fluorophenoxy)-, (4S)-4-ethyl-3,4,12,14-tetrahydro-3,14-dioxo-1H-pyrano[3',4':6,7]indolizino[1,2-b]quinoline-4,9-diyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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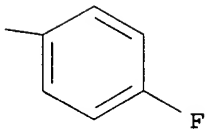
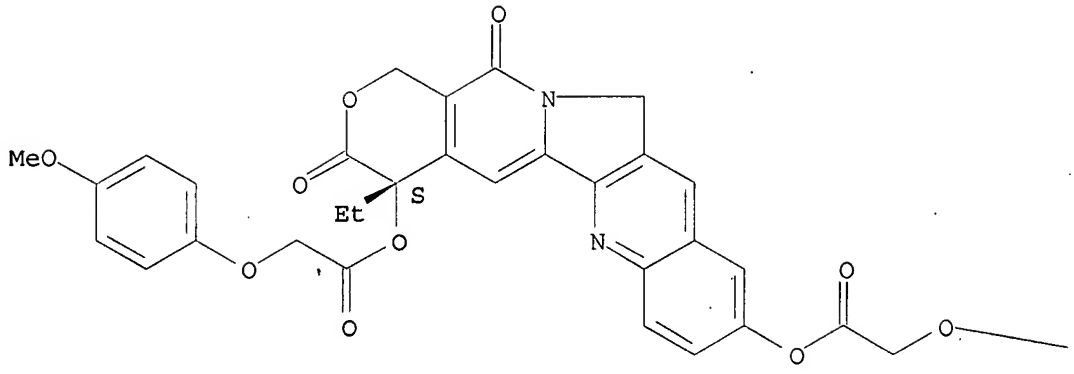


RN 634587-13-6 CAPLUS
CN Acetic acid, (4-methoxyphenoxy)-, (4S)-4-ethyl-3,4,12,14-tetrahydro-3,14-dioxo-1H-pyrano[3',4':6,7]indolizino[1,2-b]quinoline-4,9-diyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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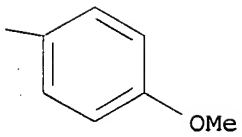


REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

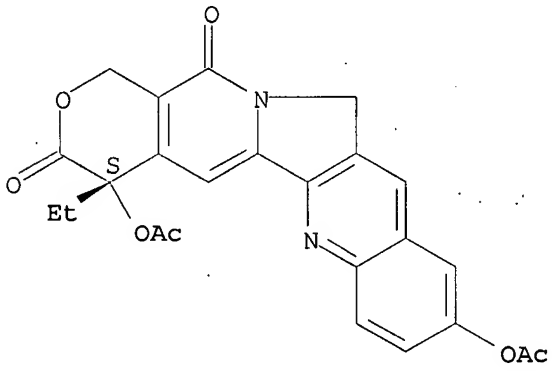
L4 ANSWER 12 OF 17 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:7891 CAPLUS
DOCUMENT NUMBER: 138:354130
TITLE: Semisynthesis of DB-67 and other silatecans from camptothecin by thiol-promoted addition of silyl radicals
AUTHOR(S): Du, Wu; Kaskar, Bashir; Blumbergs, Peter; Subramanian, P.-K.; Curran, Dennis P.
CORPORATE SOURCE: Department of Chemistry, University of Pittsburgh, Pittsburgh, PA, 15260, USA
SOURCE: Bioorganic & Medicinal Chemistry (2003), 11(3), 451-458
CODEN: BMECEP; ISSN: 0968-0896
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 138:354130
AB Thiol- or acid-promoted addns. of silyl radicals to camptothecin are reported. At 105 °C, mixts. of 7-silyl (favored) and 12-silyl

camptothecins are formed alongside substantial amts. of recovered camptothecin. At 160 °C, 12-silyl isomers are formed preferentially, but the total mass balance is substantially reduced. The silyl radical addition is featured in short semi-syntheses of DB-67 (7-tert-butyldimethylsilyl-10-hydroxy camptothecin) from both camptothecin and 10-hydroxycamptothecin.

IT 19685-12-2P 521061-96-1P 521061-97-2P
521061-98-3P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(semisynthesis of DB-67 and other silatecans from camptothecin via the thiol-promoted addition of silyl radicals to camptothecins)

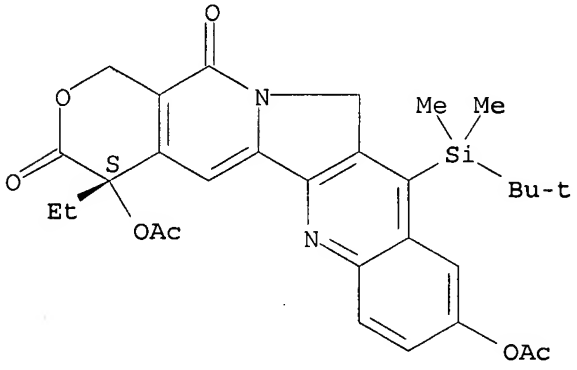
RN 19685-12-2 CAPLUS
CN 1H-Pyrano[3',4':6,7]indolizino[1,2-b]quinoline-3,14(4H,12H)-dione, 4,9-bis(acetyloxy)-4-ethyl-, (4S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



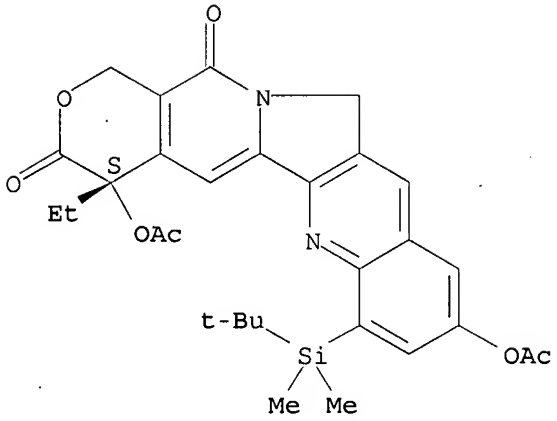
RN 521061-96-1 CAPLUS
CN 1H-Pyrano[3',4':6,7]indolizino[1,2-b]quinoline-3,14(4H,12H)-dione, 4,9-bis(acetyloxy)-11-[(1,1-dimethylethyl)dimethylsilyl]-4-ethyl-, (4S)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



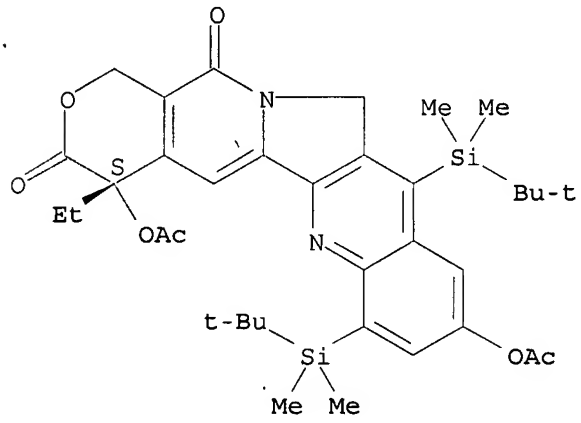
RN 521061-97-2 CAPLUS
CN 1H-Pyrano[3',4':6,7]indolizino[1,2-b]quinoline-3,14(4H,12H)-dione, 4,9-bis(acetyloxy)-7-[(1,1-dimethylethyl)dimethylsilyl]-4-ethyl-, (4S)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



RN 521061-98-3 CAPLUS
CN 1H-Pyrano[3',4':6,7]indolizino[1,2-b]quinoline-3,14(4H,12H)-dione, 4,9-bis(acetyloxy)-7,11-bis[(1,1-dimethylethyl)dimethylsilyl]-4-ethyl-, (4S)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



REFERENCE COUNT: 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 13 OF 17 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2002:928228 CAPLUS
DOCUMENT NUMBER: 138:4823
TITLE: Preparation of polyglutamic acid-camptothecin conjugates
INVENTOR(S): Bhatt, Rama; Vries, Peter; Klein, J. Peter; Tulinsky, John; Lewis, Robert A.; Singer, Jack W.
PATENT ASSIGNEE(S): Cell Therapeutics, Inc., USA
SOURCE: U.S. Pat. Appl. Publ., 26 pp., Cont.-in-part of U.S. Ser. No. 956,237.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

US 2002183243	A1	20021205	US 2002-51306		20020122
US 2002016285	A1	20020207	US 2001-810345		20010319
US 2002077290	A1	20020620	US 2001-956237		20010920
PRIORITY APPLN. INFO.:			US 2000-190429P	P	20000317
			US 2001-810345	A2	20010319
			US 2001-956237	A2	20010920

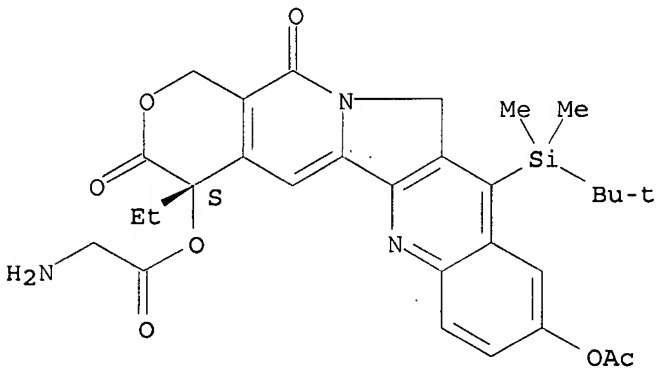
AB The invention comprises polyglutamic acid (PG)-camptothecin conjugates [PG-NH]-CH2CO-[camptothecin] [camptothecin is 20(S)-camptothecin (CPT) or a biol.-active analog] which are linked via the oxygen at position 20 of camptothecin and the γ-carbonyl of a monomeric unit of PG. A number of camptothecin derivs. were conjugated with polyglutamic acid and tested for antitumor activity. In general, PG-glycine conjugates of CPT were superior to PG-CPT conjugates made with other linkers and to comparable PG-glycine conjugates consisting of 20(S)-9-amino-, 20(S)-10-hydroxy-, 20(S)-7-ethyl-10-hydroxy- and 20(S)-10-acetoxy-7-(tert-butyldimethylsilyl)camptothecin.

IT 362497-18-5DP, reaction products with poly(L-glutamic acid)
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation and antitumor activity polyglutamic acid-camptothecin conjugates preparation and antitumor activity)

RN 362497-18-5 CAPLUS

CN Glycine, (4S)-9-(acetyloxy)-11-[(1,1-dimethylethyl)dimethylsilyl]-4-ethyl-3,4,12,14-tetrahydro-3,14-dioxo-1H-pyrano[3',4':6,7]indolizino[1,2-b]quinolin-4-yl ester (CA INDEX NAME)

Absolute stereochemistry.

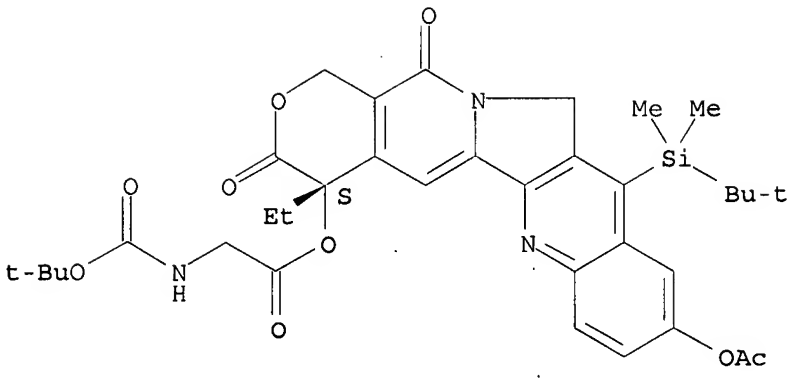


IT 362497-17-4P 362497-19-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and antitumor activity polyglutamic acid-camptothecin conjugates preparation and antitumor activity)

RN 362497-17-4 CAPLUS

CN Glycine, N-[(1,1-dimethylethoxy)carbonyl]-, (4S)-9-(acetyloxy)-11-[(1,1-dimethylethyl)dimethylsilyl]-4-ethyl-3,4,12,14-tetrahydro-3,14-dioxo-1H-pyrano[3',4':6,7]indolizino[1,2-b]quinolin-4-yl ester (CA INDEX NAME)

Absolute stereochemistry.

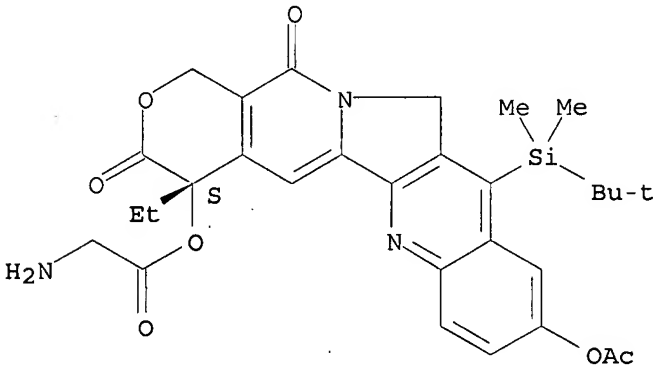


RN 362497-19-6 CAPLUS
CN Glycine, (4S)-9-(acetyloxy)-11-[(1,1-dimethylethyl)dimethylsilyl]-4-ethyl-3,4,12,14-tetrahydro-3,14-dioxo-1H-pyrano[3',4':6,7]indolizino[1,2-b]quinolin-4-yl ester, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

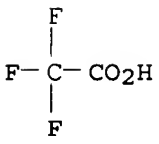
CRN 362497-18-5
CMF C30 H35 N3 O7 Si

Absolute stereochemistry.



CM 2

CRN 76-05-1
CMF C2 H F3 O2



L4 ANSWER 14 OF 17 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2002:615405 CAPLUS
DOCUMENT NUMBER: 137:169684
TITLE: Preparation and formulation of highly lipophilic camptothecin prodrugs for therapeutic use in the

10/583,803

treatment of cancer and AIDS

INVENTOR(S): Bom, David C.; Burke, Thomas G.
PATENT ASSIGNEE(S): University of Kentucky Research Foundation, USA

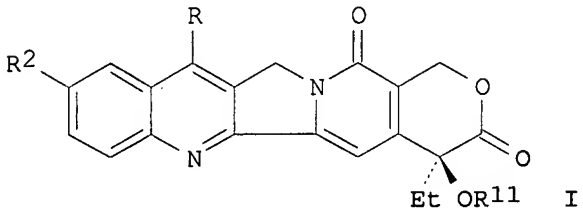
SOURCE: PCT Int. Appl., 343 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002062340	A1	20020815	WO 2002-US3548	20020206
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2002245394	A1	20020819	AU 2002-245394	20020206

PRIORITY APPLN. INFO.: US 2001-267040P P 20010207
WO 2002-US3548 W 20020206

OTHER SOURCE(S): MARPAT 137:169684

GI



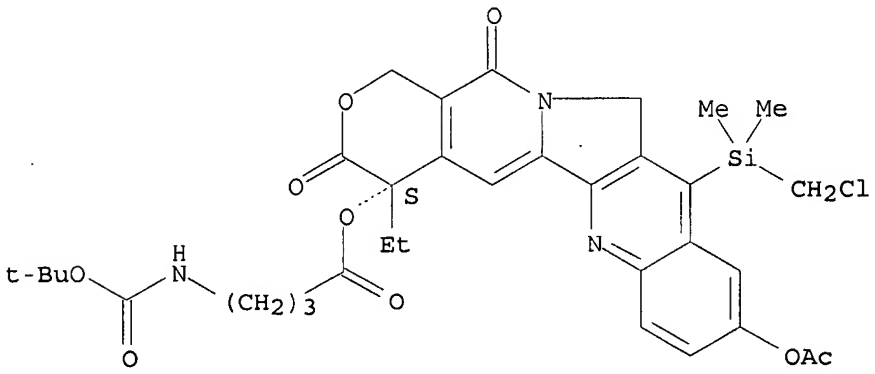
I

AB Camptothecin amino acid ester prodrug analogs, such as I [R = -X-SiR6R7R8; X = bond or connecting alkylene, alkenylene, or alkynylene group ;R2 = H, OH, CN, NO2, N3, CHO, SH, halogen, alkyl, alkenyl, alkynyl, alkoxy, aryloxy, acyloxy, etc.; R6, R7, R8 = alkyl, alkenyl, alkynyl, aryl, etc.; R11 = CO(CH2)nNR16R17; R16, R17 = H, alkyl, alkenyl, alkynyl, etc.; NR16R17 = nitrogen bound heterocyclyl; n = 1-30], of highly lipophilic silatecans of potential use in the treatment of cancer and AIDS. Thus, DB 172 I [R = (CH2)2SiMe3, R2 = R11 = H] was O-acylated with BOC-NHCH2CO2H using DMAP in CH2Cl2 to form the N-protected glycine ester I [R = (CH2)2SiMe3, R2 = H, R11 = COCH2NHCO2CMe3] with 48% yield. The protected glycine ester was then converted to the hydrochloride salt of I [R = (CH2)2SiMe3, R2 = H, R11 = COCH2NH2] with 91% yield. using HCl in dioxane. Lipophilicity, fluorescence anisotropy, and equilibrium binding consts. of the prepared camptothecin amino acid ester prodrugs were assayed.

IT 446236-04-0P 446237-73-6P 446237-77-0P
446237-81-6P 446237-85-0P 446237-89-4P
446237-93-0P 446237-97-4P 446238-01-3P
446238-05-7P 446238-09-1P 446238-13-7P
446238-17-1P 446238-21-7P 446238-25-1P
446238-29-5P 446238-33-1P 446238-37-5P
446238-41-1P 446238-45-5P 446238-49-9P
446238-53-5P 446238-57-9P 446238-61-5P
446238-65-9P 446238-69-3P 446238-73-9P

CN Butanoic acid, 4-[[(1,1-dimethylethoxy)carbonyl]amino]-, (4S)-9-(acetyloxy)-11-[(chloromethyl)dimethylsilyl]-4-ethyl-3,4,12,14-tetrahydro-3,14-dioxo-1H-pyrano[3',4':6,7]indolizino[1,2-b]quinolin-4-yl ester (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 15 OF 17 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2002:466699 CAPLUS
DOCUMENT NUMBER: 137:28287
TITLE: Polyglutamic acid-camptothecin conjugates and methods of preparation
INVENTOR(S): Bhatt, Rama; De Vries, Peter; Klein, J. Peter; Tulinsky, John; Lewis, Robert A.; Singer, Jack W.
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 22 pp., Cont.-in-part of U. S. Ser. No. 810,345.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002077290	A1	20020620	US 2001-956237	20010920
US 2002016285	A1	20020207	US 2001-810345	20010319
US 2002183243	A1	20021205	US 2002-51306	20020122
US 2003211973	A1	20031113	US 2003-407218	20030407
US 7153864	B2	20061226		
US 2003216289	A1	20031120	US 2003-407217	20030407
US 7173041	B2	20070206		

PRIORITY APPLN. INFO.:
US 2000-190429P P 20000317
US 2001-810345 A2 20010319
US 2001-956237 A2 20010920

AB The invention provides polyglutamic acid-camptothecin conjugates and methods for their preparation and use. A number of camptothecin derivs. were conjugated with polyglutamic acid and tested for antitumor activity.

IT 362497-19-6DP, reaction products with poly(L-glutamic acid)
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(polyglutamic acid-camptothecin conjugates preparation and antitumor activity)

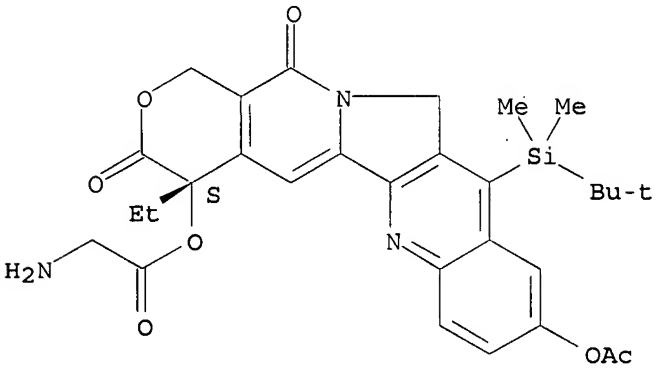
RN 362497-19-6 CAPLUS

CN Glycine, (4S)-9-(acetyloxy)-11-[(1,1-dimethylethyl)dimethylsilyl]-4-ethyl-3,4,12,14-tetrahydro-3,14-dioxo-1H-pyrano[3',4':6,7]indolizino[1,2-b]quinolin-4-yl ester, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

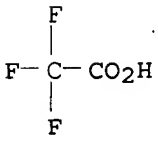
CRN 362497-18-5
CMF C30 H35 N3 O7 Si

Absolute stereochemistry.



CM 2

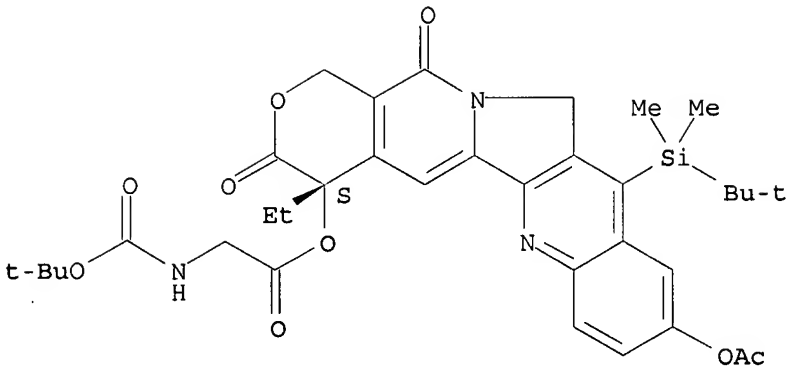
CRN 76-05-1
CMF C2 H F3 O2



IT 362497-17-4P 362497-19-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(polyglutamic acid-camptothecin conjugates preparation and antitumor activity)

RN 362497-17-4 CAPLUS
CN Glycine, N-[(1,1-dimethylethoxy)carbonyl]-, (4S)-9-(acetyloxy)-11-[(1,1-dimethylethyl)dimethylsilyl]-4-ethyl-3,4,12,14-tetrahydro-3,14-dioxo-1H-pyrano[3',4':6,7]indolizino[1,2-b]quinolin-4-yl ester (CA INDEX NAME)

Absolute stereochemistry.

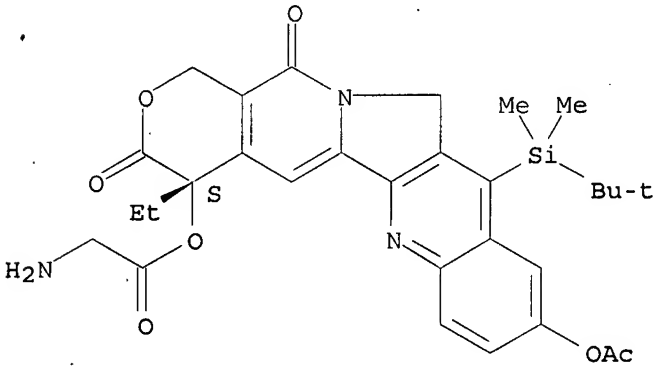


RN 362497-19-6 CAPLUS
CN Glycine, (4S)-9-(acetyloxy)-11-[(1,1-dimethylethyl)dimethylsilyl]-4-ethyl-3,4,12,14-tetrahydro-3,14-dioxo-1H-pyrano[3',4':6,7]indolizino[1,2-b]quinolin-4-yl ester, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

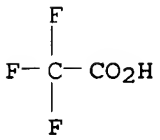
CRN 362497-18-5
CMF C30 H35 N3 O7 Si

Absolute stereochemistry.



CM 2

CRN 76-05-1
CMF C2 H F3 O2



L4 ANSWER 16 OF 17 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2001:713182 CAPLUS
DOCUMENT NUMBER: 135:262261
TITLE: Preparation and antitumor activity of polyglutamic acid-camptothecin conjugates

10/583,803

INVENTOR(S): Bhatt, Rama; De Vries, Peter; Klein, J. Peter; Lewis, Robert A.; Singer, Jack W.; Tulinsky, John
PATENT ASSIGNEE(S): Cell Therapeutics, Inc., USA
SOURCE: PCT Int. Appl., 81 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
WO 2001070275	A2	20010927	WO 2001-US8553		20010319
WO 2001070275	A3	20020103			
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CO, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW					
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG					
CA 2402643	A1	20010927	CA 2001-2402643		20010319
AU 200147513	A	20011003	AU 2001-47513		20010319
EP 1267939	A2	20030102	EP 2001-920466		20010319
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR					
HU 2002004562	A2	20030428	HU 2002-4562		20010319
JP 2003527443	T	20030916	JP 2001-568471		20010319
SI 21172	A	20031031	SI 2001-20021		20010319
BR 2001009272	A	20040629	BR 2001-9272		20010319
IN 2002KN01144	A	20050311	IN 2002-KN1144		20020910
NO 2002004421	A	20021115	NO 2002-4421		20020916
ZA 2002007423	A	20031217	ZA 2002-7423		20020916
MX 2002PA09082	A	20031211	MX 2002-PA9082		20020917
PRIORITY APPLN. INFO.:			US 2000-190429P	P	20000317
			WO 2001-US8553	W	20010319

OTHER SOURCE(S): MARPAT 135:262261

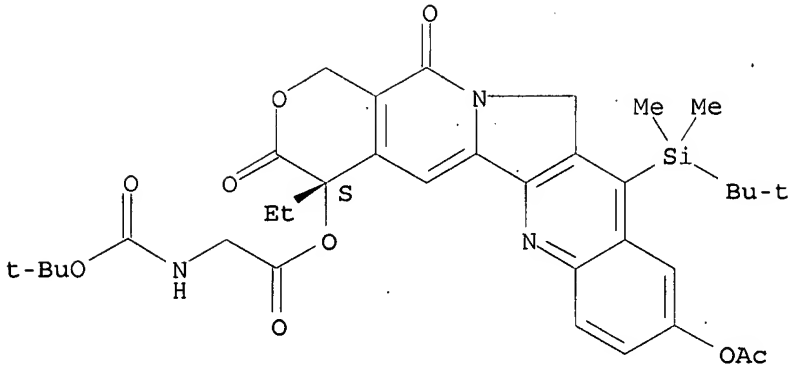
AB Methods for the preparation of polyglutamic acid-therapeutic agent conjugates are disclosed. The compds. show antitumor activity. Thus, 20(S)-camptothecin was allowed to react with N-(tert-butoxycarbonyl)glycine in DMF solution in the presence of 4-dimethylaminopyridine followed by the addition of 1-ethyl-3-(3-dimethylaminopropyl)carbodiimide. The product, 20-O-(N-(tert-butoxycarbonyl)glycyl)camptothecin, was deprotected with CF3CO2H to give 20-O-(glycyl)camptothecintrifluoroacetic acid salt which was then treated with poly-(L-glutamic acid). The conjugate, polyglutamate-glycine-camptothecin showed high antitumor activity.

IT 362497-17-4P 362497-19-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and antitumor activity of polyglutamic acid-camptothecin conjugates)

RN 362497-17-4 CAPLUS

CN Glycine, N-[(1,1-dimethylethoxy)carbonyl]-, (4S)-9-(acetyloxy)-11-[(1,1-dimethylethyl)dimethylsilyl]-4-ethyl-3,4,12,14-tetrahydro-3,14-dioxo-1H-pyrano[3',4':6,7]indolizino[1,2-b]quinolin-4-yl ester (CA INDEX NAME)

Absolute stereochemistry.

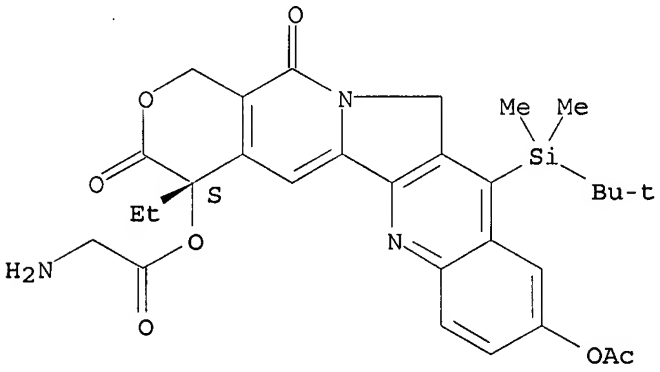


RN 362497-19-6 CAPLUS
CN Glycine, (4S)-9-(acetyloxy)-11-[(1,1-dimethylethyl)dimethylsilyl]-4-ethyl-3,4,12,14-tetrahydro-3,14-dioxo-1H-pyrano[3',4':6,7]indolizino[1,2-b]quinolin-4-yl ester, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

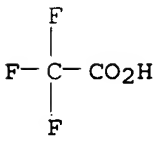
CRN 362497-18-5
CMF C30 H35 N3 O7 Si

Absolute stereochemistry.



CM 2

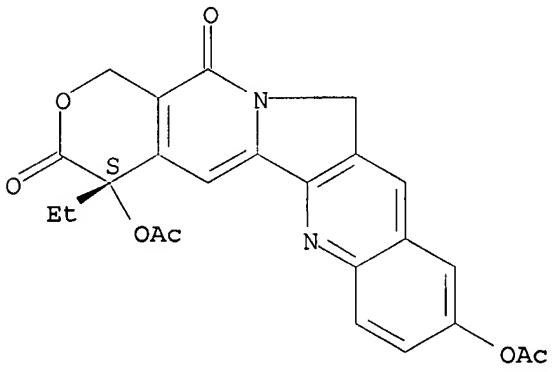
CRN 76-05-1
CMF C2 H F3 O2



L4 ANSWER 17 OF 17 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1969:422230 CAPLUS
DOCUMENT NUMBER: 71:22230
ORIGINAL REFERENCE NO.: 71:4109a,4112a
TITLE: Plant antitumor agents. II. Structure of two new

alkaloids from Camptotheca acuminata
AUTHOR(S): Wani, Mansukhlal C.; Wall, Monroe E.
CORPORATE SOURCE: Res. Triangle Inst., Durham, NC, USA
SOURCE: Journal of Organic Chemistry (1969), 34(5), 1364-7
CODEN: JOCEAH; ISSN: 0022-3263
DOCUMENT TYPE: Journal
LANGUAGE: English
GI For diagram(s), see printed CA Issue.
AB Fractionation of C. acuminata yielded 2 new alkaloids hydroxycamptothecin (I) and methoxycamptothecin (II). I could be methylated to give a Me ether identical with II. In order to establish the position of the OH group in ring A, N.M.R. spectra of deuterated II and of model compds. were obtained. The syntheses of the model compds. were described.
IT 19685-12-2P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 19685-12-2 CAPLUS
CN 1H-Pyrano[3',4':6,7]indolizino[1,2-b]quinoline-3,14(4H,12H)-dione, 4,9-bis(acetyloxy)-4-ethyl-, (4S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



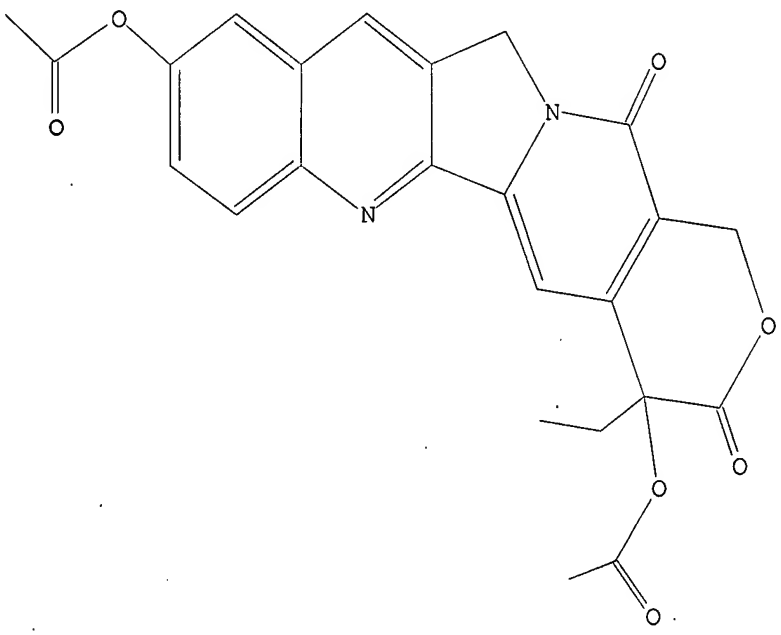
=> d his

(FILE 'HOME' ENTERED AT 17:04:34 ON 15 NOV 2007)

FILE 'REGISTRY' ENTERED AT 17:04:45 ON 15 NOV 2007
L1 STRUCTURE UPLOADED
L2 6 S L1
L3 91 S L1 FULL

FILE 'CAPLUS' ENTERED AT 17:05:13 ON 15 NOV 2007
L4 17 S L3

=> d l1
L1 HAS NO ANSWERS
L1 STR



Structure attributes must be viewed using STN Express query preparation.

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